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26 Alexithymia Predicts Affect Recognition after Acquired Brain Injury

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Objective: Alexithymia is characterized by difficulty identifying and describing one's emotions. Alexithymia is more prevalent and severe after acquired brain injury (ABI; Fynn et al., 2021). Additionally, studies have shown frequent impairment of affect recognition after ABI (Neumann et. al, 2014). Research examining the relationship between the subjective experience of alexithymia and the objective ability to recognize emotion in others has been limited, especially among individuals with ABI. Some research indicates that alexithymia is more common following traumatic brain injury (TBI) than non-traumatic brain injury such as stroke; however, no previous research has examined the relationship between alexithymia and affect perception comparing adults with TBI and stroke. Accordingly, this study aimed to fill that gap.
Participants and Methods: Participants were 218 adults in three groups: healthy adults (HA; n = 99), TBI (n = 63), and stroke (n = 56). Participants completed a neuropsychological battery that included the Toronto Alexithymia Scale-20 (TAS; Bagby et al., 1994), and a multicultural Face Emotion Perception Test (MFEPT). The MFEPT used images from the Montreal Set of Facial Displays of Emotion (Beaupré et al., 2000) to assess recognition accuracy for anger, sadness, fear, disgust, and neutral expressions. The Recognition Memory Test (RMT; Warrington, 1984) was included to account for variance in facial affect recognition associated with face recognition only.
Results: Analysis of variance indicated a significant difference among the means on TAS ($p < .001$, $\eta 2 = .09$. Tukey post hoc tests indicated lower TAS among HA than Stroke ($d = -0.73$, $p = .001$) and TBI ($d = -0.56$, $p = .002$) groups; however, TBI and Stroke did not differ significantly ($d = -0.15$, $p = .667$). Chi-square tests indicated that the percent of HA with clinically-elevated alexithymia (7.1%) was lower than Stroke (21.4%, $p = .009$) and TBI (25.8%, $p = .001$), who did not differ significantly ($p = .610$). Pearson correlations indicated medium inverse correlations between alexithymia and affect recognition for Stroke ($r = -.39$, $p = .002$) and TBI ($r = -.36$, $p = .002$). For HA, who showed low alexithymia, the relationship was not significant ($r = -.15$, $p = .070$). Examination of the TAS subscales indicated that TAS-Total correlations with MFEPT were driven primarily by Difficulty Identifying Feelings (DIF), as compared to Difficulty Describing Feelings or Externally-oriented Thinking. Partial correlations between TAS-DIF and MFEPT accounting for RMT remained significant for both TBI ($rp = -.23$, $p = .036$) and Stroke ($rp = -.39$ $p = .002$).
Conclusions: Consistent with prior research, alexithymia was more prevalent and severe among adults with TBI and stroke as compared to healthy adults. Adults with TBI and stroke showed similar levels of alexithymia, and the pattern of associations is consistent with the theory that alexithymia disrupts recognition of emotion displayed by others. This link may partly explain the robust findings of diminished and impaired social and interpersonal outcomes after ABI. Future research should test these links directly, to support the development of interventions to maximize social and interpersonal well-being after ABI.

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27 Apathy Associated with Cognition in Older Adults with Chronic Moderate to Severe Traumatic Brain Injury

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